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(54) **ELECTRODE FOR PROLONGED MONITORING OF LARYNGEAL ELECTROMYOGRAPHY**

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USPC **600/380**; 600/393; 600/546; 29/825

(58) **Field of Classification Search**
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See application file for complete search history.

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(57) **ABSTRACT**

Laryngeal surface electrodes are devices designed to hold a conductive surface against the vocal cords in order to pick up small electrical signals from the muscle known as electromyographic signals. Several embodiments of a laryngeal electromyography tube include a conductive electrode surface that is painted, screen printed or otherwise applied directly onto the body of an endotracheal tube, such that the final device has no raised surfaces which can injure the vocal cords. These endotracheal tube with integral laryngeal surface electrodes can be safely used placed for prolonged, continuous monitoring during surgery, after surgery and during intensive care treatment intubation without a need to remove and replace the tube at these various stages of treatment. In one embodiment, one electrode contacts the vocal cords and a second electrode contacts the tongue.

19 Claims, 6 Drawing Sheets